

THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

STAFF REPORT

OF THE

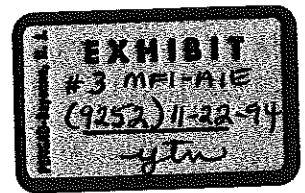
ACCOUNTING DEPARTMENT

AND

ELECTRIC DEPARTMENT

DOCKET NO. 94-006-E

DUKE POWER COMPANY



REPORT OF THE ACCOUNTING DEPARTMENT
ADMINISTRATION DIVISION
SOUTH CAROLINA PUBLIC SERVICE COMMISSION

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REPORT OF ACCOUNTING DEPARTMENT

ADMINISTRATION DIVISION

DOCKET NO. 94-006-E

DUKE POWER COMPANY

ANALYSIS

The Accounting Department Staff has made a study of the books and records of Duke Power Company, Charlotte, North Carolina, relative to the Commission's requirement under Docket No. 94-006-E, that semiannual hearings be conducted before the Commission concerning the Adjustment of Base Rates for Fuel Costs.

CURRENT REVIEW PERIOD

The current investigation of Duke Power Company's Retail Fuel Adjustment Clause covers the period June 1994 through November 1994. Since the fuel hearing is scheduled for November 1994, Staff's audit covered through the month of September 1994, with the months of October and November 1994 estimated. In the last fuel hearing, fuel figures for April and May 1994 were estimated, therefore, Staff reviewed Duke's books and records for the period April 1, 1994 through September 30, 1994. The under-recovery amount for October 1994 and the under-recovery amount for November 1994 were estimated for the purpose of adjusting base rates effective December 1, 1994. The October and November 1994 estimates will be trued-up at Duke's next semiannual hearing after the costs are examined.

SCOPE OF STUDY

The Commission's Accounting Department's examination consisted of

the following:

1. Analysis of Fuel Stock - Account # 151
2. Verification of Charges to Nuclear Fuel
Expense - Account # 518
3. Analysis of Purchased Power and Interchange (Net)
4. Verification of KWH Sales
5. Comparison of Coal Costs
6. An Analysis of Spot Coal Purchasing Procedures
7. Recomputation of Fuel Costs and Verification
of Deferred Fuel Costs
8. Recomputation of True-up for (Over)Under-Recovered
Fuel Costs

ANALYSIS OF FUEL STOCK ACCOUNT - ACCOUNT # 151

Staff's analysis of the Fuel Stock Account consisted of tracing receipts to and from the subsidiary ledgers to the General Ledger, reviewing monthly fuel charges originating in fuel accounting and insuring that only proper charges are entered in the Company's computation of fuel costs for purposes of adjusting base rates for fuel costs.

VERIFICATION OF NUCLEAR FUEL EXPENSE - ACCOUNT # 518

The Staff traced the expense amounts to the General Ledger. The expenses were also traced to filings to the Commission from the Company.

ANALYSIS OF PURCHASED AND INTERCHANGE POWER (NET)

Staff performed an examination of the Company's purchased power and interchange (Net) amount used in the Fuel Adjustment Clause.

Staff obtained the details of purchases and sales made by Duke from and to other electric utilities. Staff verified all individual transactions of purchased and interchanged power to source documents. Staff verified amounts which are being used in computing total fuel costs for each month. These details allowed the Staff to identify fuel costs which were being passed through the clause in computing the factor above or below the base for each period.

VERIFICATION OF KWH SALES

The Accounting Department Staff reconciled the KWH sales as reported to the Commission through monthly fuel adjustment filings to the Company's monthly Financial and Operating Reports.

COMPARISON OF COAL COSTS

Staff prepared exhibits from Duke's books and records reflecting coal costs during the review period. Specifically, these exhibits are as follows:

Exhibit A - Coal Cost Statistics

Exhibit B - Received Coal-Cost Per Ton Comparison

With reference to Exhibit A, Coal Cost Statistics, Staff has shown a detailed analysis of spot and contract coal for the six (6)- month period April 1994 through September 1994. The detail gives emphasis to tons purchased, percentage of tons purchased, cost per ton delivered, total delivered cost, and cost per MBTU.

In Exhibit B, Received Coal-Cost Per Ton Comparison, Staff reflects the overall cost per ton of coal by month for the three major electric utilities regulated by this Commission.

ANALYSIS OF SPOT COAL PURCHASING PROCEDURES

The Accounting Staff examined the procedure followed by the

Company's Fuel Purchasing Department for obtaining and accepting offers on spot coal. To achieve this, Staff chose a month of the audit period that had received a large amount of spot coal. Staff examined spot coal proposals received in the month of June 1994.

The Fuel Purchasing Department maintains a list of coal vendors from whom proposals are received monthly.

These coal vendors send their proposals to Duke via Spot Coal Sales Proposal Data Sheets, with each proposal or offer on a separate sheet.

If the Company decides to purchase spot coal in a given month, then the proposals are evaluated. For evaluation purposes, the spot coal sales proposals are compiled on a Spot Coal Offers computer run and are ranked by the cost per MBTU. The purchasing agents consider at least three factors when they agree to the spot coal offers: (a) the price per ton (including freight), (b) the BTU, ash, and sulfur content of the coal offered, and (c) the past experience with the supplier and the coal obtained from the producer. The Company's purchasing agents determine the current market price for spot coal prior to negotiating with the coal vendors. In this way, the agents determine the limits they should stay within when bargaining for coal. The agents bargain over the price of the coal, and either accept (the original offer or a counter offer) or reject the coal vendor's offer.

Upon acceptance of an offer, the Fuel Purchasing Department prepares a purchase order, a copy of which is mailed to the coal vendor. When the coal is received at the plant, the Company analyzes the coal for BTU, ash, and sulfur content and prepares a coal analysis report which is sent to the Fuel Purchasing Department. The appropriate

premium or penalty on the coal is determined by the Fuel Purchasing Department, and the results are forwarded to the Company's Accounting Section, which in turn, adds a premium or assesses a penalty to the total amount due to the coal vendor.

The Fuel Purchasing Department closely monitors the quality of coal shipped by the various producers. If poor performance is rendered by a certain producer, the purchasing agent records it and considers this when analyzing any future offers from the supplier.

As mentioned previously, Staff examined spot coal offers received for the month of June 1994. Staff obtained the Company's Spot Coal Offers computer run for the month. The Spot Coal Offers run is listed alphabetically by plant, with each plant's spot coal offers ranked by cost per MBTU. Also included on the Spot Coal Offers run is the name of the coal company, the name of the producer, number of tons offered, coal specifications, the number of tons purchased, the plant to which the coal was shipped, or a reason for rejecting the offer.

During the month, 44 offers were submitted and Duke accepted 8 offers.

RECOMPUTATION OF TRUE-UP FOR (OVER) UNDER-RECOVERED FUEL COSTS

Staff analyzed the cumulative over-recovery of fuel costs that the Company had incurred for the period April 1, 1994 through September 30, 1994 totaling \$674,903. Based on estimated figures for the months of October and November 1994, Staff arrived at a cumulative under-recovery of \$1,551,527. As stated in Duke Power Company's Adjustment for Fuel Costs, fuel costs will be included in base rates to the extent determined reasonable and proper by the Commission for the succeeding six months or shorter period. Accordingly, the Commission should

consider the under-recovery of \$1,551,527 and any adjustments recommended by the Commission's Electric Department along with the anticipated fuel costs for the period December 1, 1994 to May 31, 1995, for the purpose of determining the base cost of fuel in rates effective December 1, 1994.

This figure was provided to the Commission's Electric Department.

RESULTS OF EXAMINATION

Based on the Accounting Staff's examination of Duke Power Company's books and records, and the utilization of the fuel cost-recovery mechanism as directed by this Commission, the Accounting Staff is of the opinion that the Company has complied with the directives (per the Fuel Adjustment Clause) of the Commission.

EXHIBITS

Exhibits relative to this report are identified as follows:

EXHIBIT A: COAL COST STATISTICS

In Exhibit A, Coal Cost Statistics, Staff compares spot, contract and total coal received for the months of April 1994 through September 1994. The comparison is made in the following areas:

1. Tons Purchased
2. Percentage of Total Tons Purchased
3. Received Cost Per Ton
4. Total Received Cost
5. Cost Per MBTU

EXHIBIT B: RECEIVED COAL-COST PER TON COMPARISON

In Exhibit B, Staff has shown for comparison purposes, the freight

cost per ton, mine cost per ton, the total cost per ton, and the cost per MBTU of received coal for Duke Power Company, Carolina Power & Light Company, and South Carolina Electric & Gas Company. The cost per ton shown for the period April 1994 through September 1994 included both spot and contract purchases, and were extracted from required filings for Carolina Power & Light Company and South Carolina Electric & Gas Company, and from Duke Power Company's 2121 Run.

EXHIBIT C: DETAIL OF NUCLEAR COST

In Exhibit C, Staff has shown in detail, the two components in total nuclear costs. These components are as follows:

1. Burn-up Cost
2. Disposal Cost

EXHIBIT D: TOTAL BURNED COST (FOSSIL AND NUCLEAR)

This exhibit reflects the dollar amounts of burned costs, and the percentage of the Total Burned Costs for fossil and nuclear fuel by months from April 1994 through September 1994.

EXHIBIT E: COST OF FUEL

In Exhibit E, Staff has computed the total fuel cost applicable to the factor computation. There are three (3) components used in arriving at this cost. Those components are as follows:

1. Cost of Fuel Burned...This amount is the burned cost of all fossil and nuclear fuel during the period. A detailed breakdown between coal, oil, gas and nuclear fuel can be seen in Exhibit D.

2. Purchase and Interchange Power Fuel Cost... This amount is the monthly KWH's delivered to or received by one electric utility system from another.

3. Fuel Cost Recovered through Intersystem Sales... This amount

is the fuel-related cost on KWH's sold during the period to Yadkin, Inc. and other electric utilities.

Total fuel cost applicable to the factor is computed by adding the cost of fuel burned to purchased power and interchange power fuel cost. This amount is then reduced by fuel associated with intersystem sales.

EXHIBIT F: FACTOR COMPUTATION

Staff has computed the Fuel Cost Adjustment Factor by month beginning with April 1994 and going through September 1994. In computing this factor, total fuel cost applicable to the FAC is divided by total system sales, excluding intersystem sales. This results in fuel cost per KWH. The fuel cost per KWH is then compared to the base cost per KWH as ordered by the Commission. This variance is reflected as the monthly fuel cost adjustment factor.

EXHIBIT G: S.C. RETAIL COMPARISON OF FUEL REVENUES AND EXPENSES

Shown in this exhibit is the computation of the cumulative under-recovery at November 30, 1994.

ACCOUNTING EXHIBIT A

DUKE POWER COMPANY
COAL COST STATISTICS
APRIL 1994 - SEPTEMBER 1994

SPOT

MONTH	TONS RECEIVED	%	COST/TON RECEIVED	TOTAL RECEIVED COST	\$/MBTU
	TONS	%	\$	\$	\$
APRIL 1994	274,974.90	29.70	34.88	9,591,456.95	1.4225
MAY 1994	265,937.55	24.07	34.23	9,103,169.98	1.3740
JUNE 1994	277,105.45	23.98	36.75	10,184,346.19	1.4390
JULY 1994	237,316.60	24.79	35.68	8,467,167.42	1.4381
AUGUST 1994	244,674.55	18.40	36.02	8,813,417.50	1.4534
SEPTEMBER 1994	232,921.70	20.46	36.37	8,470,445.75	1.4377
TOTALS	1,532,930.75			54,630,003.79	

CONTRACT

MONTH	TONS RECEIVED	%	COST/TON RECEIVED	TOTAL RECEIVED COST	\$/MBTU
	TONS	%	\$	\$	\$
APRIL 1994	650,893.05	70.30	44.18	28,757,146.54	1.7907
MAY 1994	838,751.60	75.93	43.03	36,094,868.23	1.7435
JUNE 1994	878,413.65	76.02	44.63	39,204,739.41	1.8011
JULY 1994	719,983.45	75.21	43.18	31,087,690.79	1.7597
AUGUST 1994	1,085,310.15	81.60	42.13	45,721,844.43	1.7145
SEPTEMBER 1994	905,503.00	79.54	42.70	38,661,495.15	1.7250
TOTALS	5,078,854.90			219,527,784.55	

COMBINED

MONTH	TONS RECEIVED	%	COST/TON RECEIVED	TOTAL RECEIVED COST	\$/MBTU
	TONS	%	\$	\$	\$
APRIL 1994	925,867.95	100.00	41.42	38,348,603.49	1.6818
MAY 1994	1,104,689.15	100.00	40.91	45,198,038.21	1.6539
JUNE 1994	1,155,519.10	100.00	42.74	49,389,085.60	1.7123
JULY 1994	957,300.05	100.00	41.32	39,554,858.21	1.6793
AUGUST 1994	1,329,984.70	100.00	41.01	54,535,261.93	1.6661
SEPTEMBER 1994	1,138,424.70	100.00	41.40	47,131,940.90	1.6652
TOTALS	6,611,785.65			274,157,788.34	

ACCOUNTING EXHIBIT B

DUKE POWER COMPANY
 RECEIVED COAL - COST PER TON COMPARISON
 APRIL 1994 - SEPTEMBER 1994

DUKE POWER COMPANY				
MONTH	INVOICE COST PER TON	FREIGHT COST PER TON	TOTAL COST PER TON	COST PER MBTU
	\$	\$	\$	\$
APRIL 1994	30.90	10.52	41.42	1.6818
MAY 1994	30.82	10.09	40.91	1.6539
JUNE 1994	32.36	10.38	42.74	1.7123
JULY 1994	30.73	10.59	41.32	1.6793
AUGUST 1994	30.81	10.20	41.01	1.6661
SEPTEMBER 1994	31.18	10.22	41.40	1.6652

CAROLINA POWER & LIGHT COMPANY				
MONTH	INVOICE COST PER TON	FREIGHT COST PER TON	TOTAL COST PER TON	COST PER MBTU
	\$	\$	\$	\$
APRIL 1994	31.92	11.01	42.93	1.7149
MAY 1994	33.15	10.84	43.99	1.7485
JUNE 1994	33.83	10.56	44.39	1.7637
JULY 1994	32.67	11.09	43.76	1.7483
AUGUST 1994	31.96	10.97	42.93	1.7356
SEPTEMBER 1994	31.54	10.74	42.28	1.6995

SOUTH CAROLINA ELECTRIC & GAS COMPANY				
MONTH	INVOICE COST PER TON	FREIGHT COST PER TON	TOTAL COST PER TON	COST PER MBTU
	\$	\$	\$	\$
APRIL 1994	25.88	14.44	40.32	1.5652
MAY 1994	26.10	14.30	40.40	1.5662
JUNE 1994	26.15	14.36	40.51	1.5730
JULY 1994	26.01	14.59	40.60	1.5731
AUGUST 1994	26.27	14.41	40.68	1.5801
SEPTEMBER 1994	26.44	14.43	40.87	1.5940

ACCOUNTING EXHIBIT C

DUKE POWER COMPANY
 DETAIL OF NUCLEAR COST
 APRIL 1994 - SEPTEMBER 1994

MONTH	BURN-UP COST	DISPOSAL COST	TOTAL NUCLEAR COST
	\$	\$	\$
APRIL 1994	16,056,064	3,279,411	19,335,475
MAY 1994	14,130,964	2,826,310	16,957,274
JUNE 1994	13,879,825	2,762,105	16,641,930
JULY 1994	15,549,947	3,051,209	18,601,156
AUGUST 1994	14,506,456	2,901,099	17,407,555
SEPTEMBER 1994	13,582,338	2,610,855	16,193,193
TOTAL	<u>87,705,594</u>	<u>17,430,989</u>	<u>105,136,583</u>

ACCOUNTING EXHIBIT D

DUKE POWER COMPANY
TOTAL BURNED COST (FOSSIL AND NUCLEAR)
APRIL 1994 - SEPTEMBER 1994

MONTH	COAL		OIL		GAS		NUCLEAR		TOTAL BURNED COST	
	\$	%	\$	%	\$	%	\$	%	\$	%
APRIL 1994	20,742,292	51.12	409,524	1.01	90,088	.22	19,335,475	47.65	40,577,379	
MAY 1994	41,839,557	70.72	336,905	.57	25,441	.04	16,957,274	28.67	59,159,177	
JUNE 1994	65,071,778	78.38	195,439	.23	1,111,136	1.34	16,641,930	20.05	83,020,283	
JULY 1994	55,013,618	74.57	304,399	.41	(147,083)	(.19)	18,601,156	25.21	73,772,090	
AUGUST 1994	49,771,570	73.79	259,289	.38	12,580	.02	17,407,555	25.81	67,450,994	
SEPTEMBER 1994	40,243,086	71.04	208,992	.37	3,755	.01	16,193,193	28.58	56,649,026	

ACCOUNTING EXHIBIT E

DUKE POWER COMPANY
 COST OF FUEL
 APRIL 1994 - SEPTEMBER 1994

MONTH	TOTAL COST OF FUEL BURNED	PURCHASE AND INTERCHANGE POWER FUEL COST	FUEL COST RECOVERED INTERSYSTEM SALES	TOTAL FUEL COST
	\$	\$	\$	\$
APRIL 1994	40,577,379	5,759,227	(5,773,826)	40,562,780
MAY 1994	59,159,177	2,568,104	(2,180,833)	59,546,448
JUNE 1994	83,020,283	7,478,079	(8,729,578)	81,768,784
JULY 1994	73,772,090	4,886,330	(4,070,778)	74,587,642
AUGUST 1994	67,450,994	6,460,245	(2,961,888)	70,949,351
SEPTEMBER 1994	56,649,026	5,945,177	(2,516,098)	60,078,105
TOTALS	380,628,949	33,097,162	(26,233,001)	387,493,110

ACCOUNTING EXHIBIT F

DUKE POWER COMPANY
FACTOR COMPUTATION
APRIL 1994 - SEPTEMBER 1994

MONTH	TOTAL SYSTEM		FUEL COST PER KWH SALES \$/KWH	BASE COST		FUEL ADJUSTMENTS PER KWH \$/KWH
	TOTAL FUEL COSTS \$	SALES EXCLUDING INTERSYSTEM SALES KWH		PER KWH INCLUDED IN RATES \$/KWH	PER KWH INCLUDED IN RATES \$/KWH	
APRIL 1994	40,562,780	5,356,591,000	0.007572	0.010000	(0.002428)	
MAY 1994	59,546,448	5,489,340,000	0.010847	0.010000	0.000847	
JUNE 1994	81,768,784	6,274,686,000	0.013032	0.010000	0.003032	
JULY 1994	74,587,642	6,724,293,000	0.011092	0.010000	0.001092	
AUGUST 1994	70,949,351	7,036,481,000	0.010083	0.010000	0.000083	
SEPTEMBER 1994	60,078,105	6,494,094,000	0.009251	0.010000	(0.000749)	

Duke Power Company
S.C. Retail Comparison of Fuel Revenues & Expenses
April 1994 - November 1994

Description	A C T U A L					E S T I M A T E D	
	April 1994	May 1994	June 1994	July 1994	August 1994	September 1994	October 1994 November 1994
Fossil Fuel (151)	21,241,904	42,201,903	66,378,353	55,170,934	50,043,439	40,455,833	42,000,000 38,241,000
Nuclear	19,335,475	16,957,274*	16,641,930	18,601,156	17,407,555	16,193,193	14,251,000 16,637,000
Purchased Power	5,759,227	2,568,104	7,478,079	4,886,330	6,460,245	5,945,177	5,532,000 5,363,000
Subtotal	46,336,606	61,727,281	90,498,362	78,658,420	73,911,239	62,594,203	61,783,000 60,241,000
Less: Fuel Cost Recovered through Intersys. Sales	5,773,826	2,180,833	8,729,578	4,070,778	2,961,888	2,516,098	2,676,000 2,567,000
FUEL COST	40,562,780	59,546,448	81,768,784	74,587,642	70,949,351	60,078,105	59,107,000 57,674,000
Total System KWH Sales	5,356,591,000	5,489,340,000	6,274,686,000	6,724,293,000	7,036,481,000	6,494,094,000	5,463,179,000 5,447,837,000
Excluding Inters. Sales	.007572	.010847	.013032	.011092	.010083	.009251	.010819 .010587
\$/KWH Sales	.010000	.010000	.010000	.010000	.010000	.010000	.010000 .010000
Less: Base \$/KWH Sales	(.002428)	.000847	.003032	.001092	.000083	(.000749)	.000819 .000587
Fuel Adjustment Per KWH	1,546,498,000	1,580,119,000	1,717,963,000	1,774,946,000	1,968,727,000	1,836,469,000	1,622,724,000 1,528,823,000
SC KWH Sales	(3,754,897)	1,338,361	5,208,864	1,938,241	163,404	(1,375,515)	1,329,011 897,419
(Over) Under-Recovery	(4,193,361)						
Cumulative (Over)/Under Recovery from March 1994	(7,948,258)	(6,609,897)	(1,401,033)	537,208	700,612	(674,903)	654,108 1,551,527 **
Cumulative (Over)/Under Recovery This Period							

* The Company's Nuclear Fuel Costs figure for May 1994 of \$16,956,274 (rounded to \$16,956,000 per the Company's testimony in Docket No. 94-006-E) includes an adjustment of \$1,000 which corrected a calculation error in the March 1994 Nuclear Fuel Costs. It should be noted that Staff reflected the correct March 1994 Nuclear Fuel Costs figure in Staff's last fuel report per Docket No. 94-005-E. Therefore, Staff's Nuclear Fuel Costs figure for May 1994 is shown as \$16,957,274.

** Figure does not include gross receipts taxes.